

Serial No. 09/884,231

Filed: June 19, 2001

Examiner and Applicants' representative Sanders N. Hillis, the office action mailed on May 20, 2003 was discussed and agreement with respect to the claims was reached. (See Interview Summary mailed on June 19, 2003.)

Election/Restrictions

Applicants agree that Claims 20, 21 and 23 are non-elected claims that stand as withdrawn from further consideration as detailed in the Response to Restriction Requirement mailed on February 18, 2002. The Examiner has asserted that claims 29, 31 and 32 that were added in the Request for Continued Examination and Amendment mailed on March 14, 2003 are directed to an invention that is independent or distinct from the invention originally claimed. The Examiner has therefore unilaterally withdrawn claims 29, 31 and 32 from further consideration as being directed to a non-elected invention. Applicants respectfully traverse the assertions that claims 29, 31 and 32 are directed to an invention that is independent and distinct from the invention originally claimed for at least the following reasons.

Claim 29 is a dependent claim directed to a method of making a woven spider as disclosed in independent Claim 28. Claim 29 discloses that the method of Claim 28 further includes leaving a determined length of the selected thread that is wrapped with the electrical conductor positioned adjacent to the woven cloth in a determined position so that the selected thread that is wrapped with the electrical conductor extends beyond an edge of the woven cloth when the woven cloth is molded and trimmed to a desired shape to form the woven spider. The method of Claim 29 describes methods involve what is termed as "float" in the detailed description on page 12 lines 1-16. The method disclosed in Claim 3 (which remains pending in the application) also describes methods related to the "float." Clearly, the method of Claim 29 is directed to the elected invention.

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Claim 31 is a dependent claim directed to a method of making a woven spider as disclosed in independent Claim 28. The method of Claim 28 includes weaving a selected thread that is wrapped with the electrical conductor into a woven cloth that forms a woven spider. Claim 31 discloses that weaving further includes positioning the selected thread wrapped with the electrical conductor so that the selected thread with the electrical conductor is a flex locus of the woven cloth. As described in the specification on page 9 lines 14-17, the selected thread wrapped with the electrical conductor is weaved as part of the cloth to be positioned at the flex locus of the cloth, rather than on the surface of the cloth. Accordingly, Claim 31 discloses further features of the method of making a woven spider disclosed in Claim 28. Claims 1, 30 and 33 also disclose methods related to making a woven spider. Clearly, the method of Claim 31 is directed to the elected invention.

Claim 32 is a dependent claim directed to a method of making a woven spider as disclosed in independent Claim 28. Claim 32 discloses that the method of Claim 28 further includes leaving a determined length of the thread that is wrapped with the electrical conductor unwoven and trimming the woven cloth to create a central opening and a desired outer circumference of the woven cloth so that the unwoven determined length of the selected thread that is wrapped with the electrical conductor extends beyond the desired outer circumference of the woven cloth to readily provide electrical connection of the electrical conductor to a loudspeaker terminal. The method of Claim 32 describes methods related to making a woven spider and to what is termed as "float" in the detailed description on page 12 lines 1-16. The method disclosed in Claim 3 (which remains pending in the application) also describes methods related to the "float." Clearly, the method of Claim 32 is directed to the elected invention.

Claim Rejections pursuant to 35 U.S.C. §102(b)

Claims 1-3, 18, 28, 30 and 33 stand rejected pursuant to 35 U.S.C. §102(b) as being anticipated by European Patent Publication EP 0479317 (hereinafter referred to as EP '317).

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The Examiner has asserted that Figure 9 of EP '317 teaches all the elements disclosed by claims 1-3, 18, 28, 30 and 33. In addition, the Examiner has also asserted that EP '317 shows wrapping an electrical conductor 2H around a thread H in Figure 5 and that this wrapped thread is clearly weaved into a cloth as shown in Figure 6.

EP '317 teaches a method of making loudspeaker dampers by treating a woven cloth (1, 1F) and either sewing wires (2, 2H) to the woven cloth (Figs. 2, 3, 5 and 6) or interleaving the wires (2B, 2C) into the woven cloth (1F) (Figs. 8 and 9). In addition, EP '317 teaches that after sewing, the wires (2H) may be coated in a predetermined area with a creamy solder (CH). (Col. 5 lines 6-9) The woven cloth is thermally molded in a mold and the creamy solder is heated. (Fig. 4 and Col. 5 lines 28-34) When the woven cloth is removed from the mold, the creamy solder melts to form preparatory solder (H) that is fixedly attached to the wires. (Col. 5 lines 33-37)

The Examiner has indicated that EP '317 discloses "selecting a thread H of a cloth 1F from which the spider is to be woven; helically wrapping an electrical conductor 2H around the selected thread H; and weaving the wrapped thread in the cloth (shown in Fig. 9)." The element "H" to which the Examiner is referring appears in Figures 5 and 6 and is the previously described preparatory solder that is formed at the end portion of the wires identified as 2H. (Col. 6 lines 38-41) The element "H" is described as the preparatory solder in Col. 3 lines 48-52, Col. 5 lines 33-37, Col. 5 lines 44-46 Col. 6 lines 13-15 and Col. 6 lines 19-23. The element "2H" is described as wires in Col. 4 lines 53-56.

Thus, EP '317 fails to teach, suggest or disclose wrapping an electrical conductor around a thread as disclosed by claims 1, 2, 18 and 28. In fact, EP '317 teaches away from the invention disclosed by claims 1, 2, 18 and 28 by teaching that only the wires 2C or 2B are interleaved into the woven cloth 1F (Fig. 8 and 9, Col. 5 line 58 and Col. 6 lines 1-4).

With regard to Claim 33, the Examiner has asserted that EP '317 "teaches coupling the electrical conductor to a voice coil wire (terminals) with a conductive adhesive (solder), and

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applying a non-conductive adhesive (molded resin) between the woven spider and a coil former (loudspeaker unit not shown) to cover the conductive adhesive and join the woven spider and the coil former." Applicants respectfully traverse this rejection since the molded resin taught by EP '317 that is impregnated into the woven cloth is a thermosetting resin applied prior to the coupling the electrical conductors to the woven cloth. (Col. 3 lines 32-40) The thermosetting resin as taught by EP '317 is used to harden the woven cloth during molding. (Col. 3 lines 46-48) In contradistinction, Claim 33 discloses application of a non-conductive adhesive between the woven spider and a coil former to cover the conductive adhesive and join the woven spider and the coil former. EP '317 fails to teach, suggest or disclose such an adhesive that is applied as described in Claim 33 to join the woven spider and the coil former as asserted by the Examiner.

For at least the foregoing reasons, Applicants respectfully request removal of the 35 U.S.C. §102(b) rejection of independent Claims 1, 2, 18, 28 and dependent Claim 33. Since dependent Claim 3 depends from independent Claim 2, and dependent Claim 30 depends from independent Claim 28, removal of the rejection of Claims 3 and 30 is also requested for the same reasons.

Claim Rejections pursuant to 35 U.S.C. §103(a)

Claims 4, 5 and 19 stand rejected pursuant to 35 U.S.C. §103(a) as obvious in view of EP '317 and European Patent Publication EP 0369434 (herein after referred to as EP '434). Applicants respectfully traverse these rejections for at least the foregoing reasons discussed with respect to EP '317. Specifically, since EP '317 does not teach, suggest or disclose wrapping an electrical conductor around a thread, reconsideration of Claims 4, 5 and 19 is respectfully requested. Applicants respectfully request removal of the 35 U.S.C. §103(a) rejection of claims 4, 5 and 19.


Applicants believe that claims 1-19 and 28-33 are allowable in their present form and that this application is in condition for allowance. It is therefore respectfully requested that the

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Examiner so find and issue a Notice of Allowance in due course. Should the Examiner deem a telephone conference to be beneficial in expediting allowance of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below. No fees in addition to those enclosed, are believed to be required at this time. However, should any additional fees be deemed necessary, please charge such fees to Deposit Account No. 23-1925.

Respectfully submitted,



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